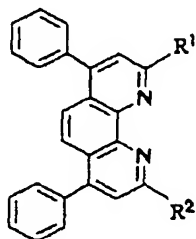


WHAT IS CLAIMED IS:

1. A bathophenanthroline compound of the following general formula [I]

General Formula [I]:



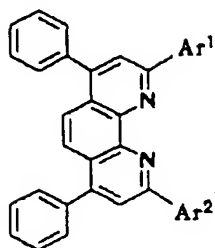
wherein R<sup>1</sup> and R<sup>2</sup> may be the same or different and independently represent a linear, branched or cyclic, saturated or unsaturated hydrocarbon group, or a substituted or unsubstituted, saturated or unsaturated hydrocarbon group provided that at least one of R<sup>1</sup> and R<sup>2</sup> has at least two carbon atoms.

2. A bathophenanthroline compound according to Claim 1, wherein said compound is used as an organic layer of an organic electroluminescent device.

3. A bathophenanthroline compound according to Claim 2, wherein said organic layer consists of a carrier transport layer.

4. A bathophenanthroline compound of the following general formula [II]

General Formula [II]:



wherein Ar<sup>1</sup> and Ar<sup>2</sup> may be the same or different and independently represent a substituted or unsubstituted aryl group.

5. A bathophenanthroline compound according to Claim 4, wherein said compound is used as an organic layer of an organic electroluminescent device.

6. A bathophenanthroline compound according to Claim 5, wherein said organic layer consists of a carrier transport layer.

7. A process for preparing a bathophenanthroline compound, which comprising subjecting a lithium compound of the following general formula [III]

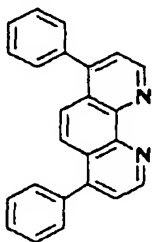
General Formula [III]:



wherein R<sup>3</sup> and R<sup>4</sup> may be the same or different and independently represent a linear, branched or cyclic, saturated or unsaturated hydrocarbon group or a

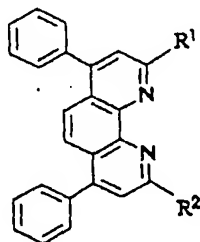
substituted or unsubstituted, saturated or unsaturated hydrocarbon group provided that at least one of  $R^3$  and  $R^4$  has at least two carbon atoms, and bathophenanthroline of the structural formula [IV]

Structural Formula [IV]:



to nucleophilic substitution reaction to obtain a bathophenanthroline compound of the general formula [I]

General Formula [I]:



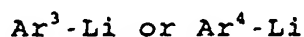
wherein  $R^1$  and  $R^2$  may be the same or different and independently represent a linear, branched or cyclic, saturated or unsaturated hydrocarbon group, or a substituted or unsubstituted, saturated or unsaturated

hydrocarbon group provided that at least one of  $R^1$  and  $R^2$  has at least two carbon atoms.

8. A process according to Claim 7, wherein said nucleophilic substitution reaction is carried out in such a way that a carbanion is generated from said lithium compound in a solution and reacted with said bathophenanthroline.

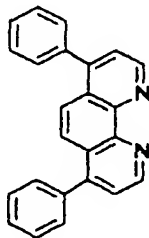
9. A process for preparing a bathophenanthroline compound, which comprising subjecting a lithium compound of the following general formula [V]

General Formula [V]:



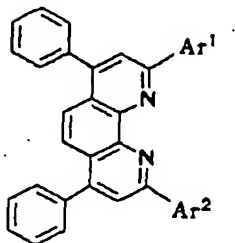
wherein  $\text{Ar}^3$  and  $\text{Ar}^4$  may be the same or different and independently represent a substituted or unsubstituted aryl group, and bathophenanthroline of the following structural formula [IV]

Structural Formula [IV]:



to nucleophilic substitution reaction to obtain a bathophenanthroline compound of the general formula [II]

General Formula [II]:



wherein Ar<sup>1</sup> and Ar<sup>2</sup> may be the same or different and independently represent a substituted or unsubstituted aryl group.

10. A process according to Claim 9, wherein said nucleophilic substitution reaction is carried out in such a way that a carbanion is generated from said lithium compound in a solution and reacted with said bathophenanthroline.